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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/735,606	12/14/2000	Gerard Hartnett	P66021US0	5782

7590 07/01/2004

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WASHINGTON, DC 20004

EXAMINER
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NGUYEN, VAN H

ART UNIT	PAPER NUMBER
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2126

DATE MAILED: 07/01/2004

10

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/735,606

Applicant(s)

HARTNETT, GERARD

Examiner

VAN H NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 2-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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### DETAILED ACTION

1. This Office Action is in response to amendment C filed April 7, 2004. Claims 2-13 remain in this application.

#### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 3-10, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Edmond et al.** "*R-OK: A Reflective Model for Distributed Object Management*" 1995 IEEE, (pp.1-8) in view of **Bunch et al.** (U.S. 5,940,487).
4. As to claim 13, Edmond teaches the invention substantially as claimed including a control framework (*the R-OK model*; abstract/ *a flexible framework*; page.7, right column, fourth paragraph) for control of services (*for providing structured descriptions and coordinated execution of several reflective distributed computing tasks*; page 7, right column, fourth paragraph), the control framework comprising an application domain level (*domain knowledge...problem domain*; page 1, left column/*domain level*; page 5, right column, last paragraph) comprising control logic domain objects (*domain objects*; abstract and page.7, right

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column, third paragraph) having object classes (*classes and objects*; page.7, right column, third paragraph), and a meta level (*the metalevel*; abstract) comprising meta objects (*Metaobjects*; abstract/*meta-objects*; page.7, right column, third paragraph) which represent the domain object classes (*used to describe and monitor every domain object in the system*; abstract/*meta-objects which convey information about or control the implementation and interpretation of their respective domain objects*; page 7, right column, third paragraph).

Edmond does not explicitly use the terms “a telecommunication controller and telecommunication services” and “isolate the domain objects from the services.”

Bunch teaches a telecommunication controller and telecommunication services (abstract) and isolate the domain objects from the services (col.5, lines 10-22).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Bunch with Edmond because Bunch’s teachings would have provided the capability for managing domain objects and meta objects and generating high performance controller for a wide variety of applications.

5. As to claim 3, Edmond teaches the meta objects are structured in a hierarchy of abstract classes for declaring actions and attributes (page 6, right column).

6. As to claim 4, Edmond teaches wherein the meta objects invoke actions on domain objects and changes to attributes of domain objects (page 6, right column).

7. As to claim 5, Edmond teaches the controller comprises a key class naming objects in the domain level (page 5, left column).

8. As to claim 6, Edmond teaches the meta level defines containment of domain level objects and the domain level automatically notifying the meta level of containment modification (page 7, left column).
9. As to claim 7, Edmond teaches interrogate a base object containment hierarchy to locate a required object in response to a request from a requesting object (page 5, right column).
10. As to claim 8, Edmond teaches the meta objects perform persistence data operations transparently to the domain objects (page 6, right column).
11. As to claim 9, Edmond teaches the meta objects update a data backup controller for fault tolerance transparently to the domain objects (page 3, right column).
12. As to claim 10, Edmond teaches verify base object proposals to update real resource attributes (page 7, left column).
13. As to claim 12, Edmond teaches the adapter objects are contained in a services level in the controller (page 1, right column and page 7, right column).
14. Claims 2 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Edmond et al.** in view of Bunch et al. as applied to claims 1 and 8 above and further in view of **Rubin**.
15. As to claim 2, the combination of Edmond and Bunch does not explicitly teach “event channels for automatic notification to subscribers. ”

Rubin teaches event channels for automatic notification to subscribers (*notifying programs that a logical event has occurred on a network*; abstract).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Rubin’s teachings in the system of Edmond as modified by

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Bunch because Rubin's teachings would have provided the capability for monitoring logical events on a network and performing a function call to alert all users of the occurrence of the event.

16. As to claim 11, the combination of Edmond and Bunch does not explicitly teach "publish events on channels to notify adapter objects. "

Rubin teaches means for publishing events on channels to notify adapter objects (abstract).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Rubin's teachings in the system of Edmond as modified by Bunch because Rubin's teachings would have provided the capability for monitoring logical events on a network and performing a function call to alert all users of the occurrence of the event.

### ***Response to Arguments***

17. Applicant's arguments filed on April 7, 2004 have been fully considered, but are deemed to be moot in view of the new grounds of rejection.

18. In the remarks, Applicant argued in substance that (1) the primary reference of Edmond et al. is undated; (2) Edmond et al. does not teach isolation of the domain objects.

A. As to point (1), the dated reference is provided with this office action.

B. As to point (2), the Examiner agrees. "Isolation of the domain objects", however, are met by Bunch as discussed in the rejection above.

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Accordingly, the combination of Edmond, Bunch, and Rubin meets the limitations as claimed by Applicant.

*Conclusion*

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN H NGUYEN whose telephone number is (703) 306-5971.

The examiner can normally be reached on Monday-Thursday from 8:30AM - 6:00PM. The examiner can also be reached on alternative Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (703) 305-9678.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VHN

  
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